

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P647657

Luminaire Tested: **GALN-SA9D-835-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647657  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-835-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 54812.3 lumens  
Efficiency: N/A  
Efficacy: 99.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G5

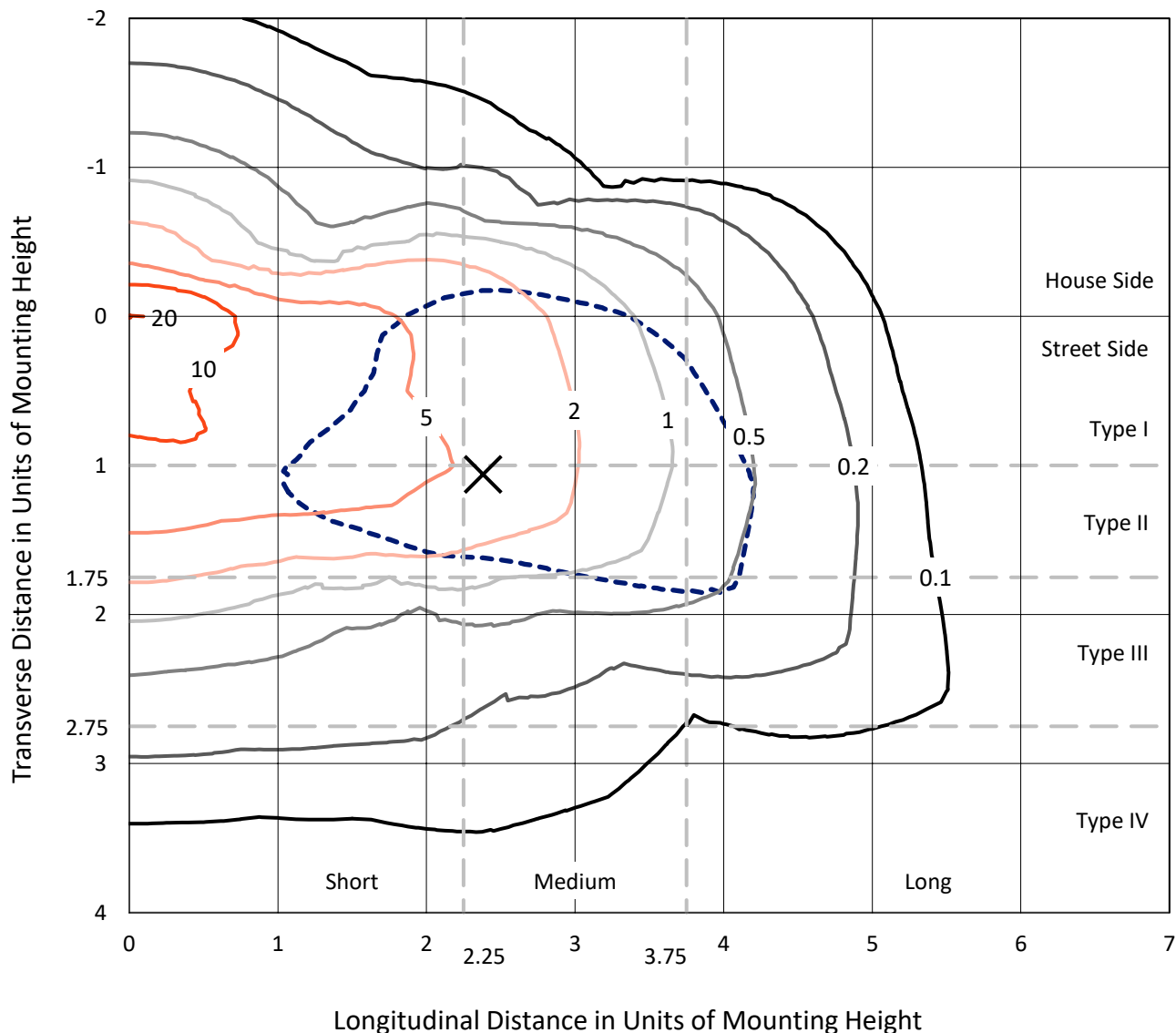
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

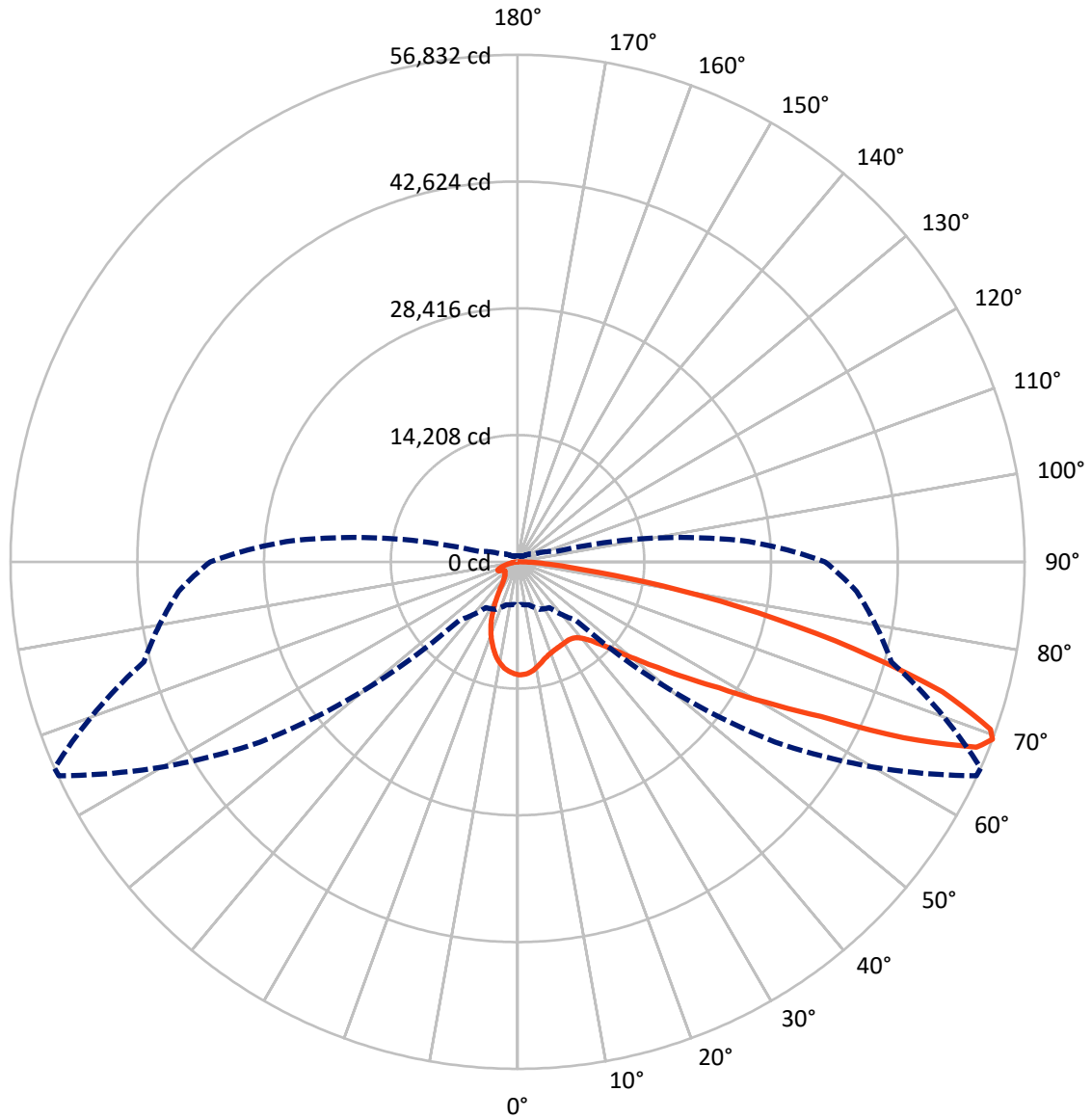
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.3 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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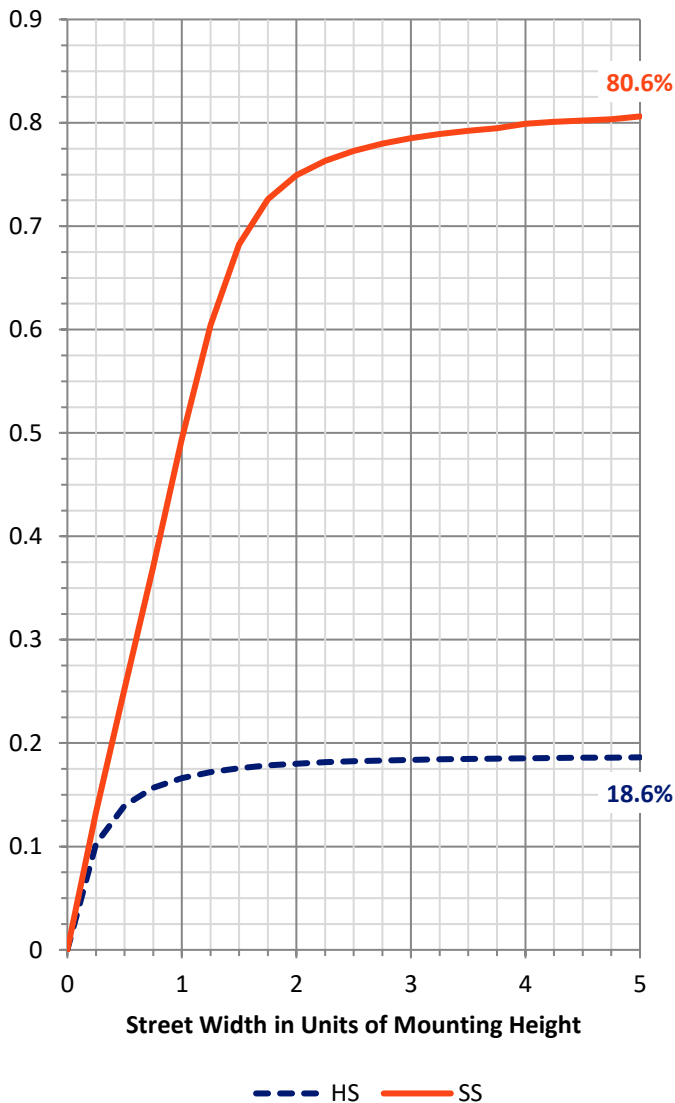
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10308.1	0.0	10308.1
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	44504.2	0.0	44504.2
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	54812.3	0.0	54812.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1099.2	2.0
10°-20°	2607.2	4.8
20°-30°	3549.3	6.5
30°-40°	4769.5	8.7
40°-50°	7121.7	13.0
50°-60°	11328.2	20.7
60°-70°	13933.1	25.4
70°-80°	9065.5	16.5
80°-90°	1338.7	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	54812.3	100.0
0°-180°	54812.3	100.0

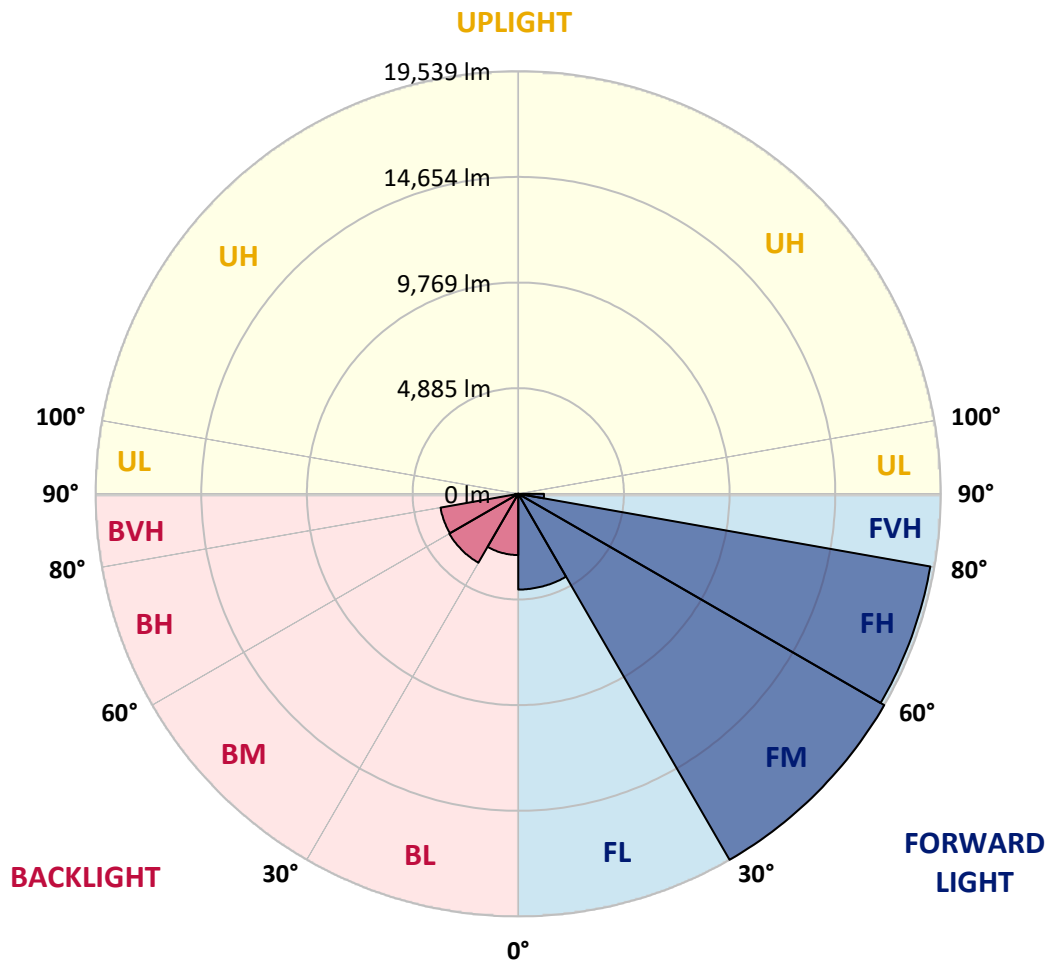


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4426.0	8.1			
FM (30°-60°)	19538.9	35.6			
FH (60°-80°)	19349.0	35.3			G5
FVH (80°-90°)	1190.2	2.2			G5
BL (0°-30°)	2829.6	5.2	B4/5000		
BM (30°-60°)	3680.5	6.7	B3/5000		
BH (60°-80°)	3649.5	6.7	B4/5000		G4/5000
BVH (80°-90°)	148.5	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7
2.5°	12214.5	12263.1	12317.8	12378.4	12493.8	12557.5	12603.1	12654.7	12660.7	12688.0	12666.8
5°	11313.0	11370.6	11452.6	11568.0	11741.0	12011.1	12290.4	12518.1	12545.4	12672.9	12709.3
7.5°	10560.2	10593.6	10660.4	10845.6	11091.4	11391.9	11798.6	12260.1	12326.8	12630.3	12736.6
10°	9947.1	9980.4	10059.4	10250.6	10493.5	10869.8	11316.1	11923.1	11977.8	12499.9	12742.7
12.5°	9488.7	9519.1	9604.0	9792.3	10071.5	10423.6	10915.3	11558.9	11637.8	12326.8	12685.0
15°	9139.6	9197.4	9267.1	9421.9	9716.4	10056.3	10532.9	11225.0	11288.7	12144.7	12645.5
17.5°	8990.9	9018.2	9066.8	9209.5	9425.0	9758.8	10238.4	10964.0	11039.8	12017.2	12636.4
20°	8997.0	9024.3	9033.4	9112.3	9267.1	9555.5	10029.1	10757.6	10848.6	11904.9	12651.6
22.5°	9203.4	9206.4	9173.0	9145.8	9206.4	9446.2	9880.3	10602.7	10708.9	11856.3	12663.8
25°	9522.1	9576.7	9528.2	9400.7	9288.4	9403.8	9822.6	10517.7	10617.9	11786.5	12648.6
27.5°	10038.1	10047.2	10007.8	9834.8	9543.4	9458.3	9798.3	10454.0	10538.9	11734.9	12572.7
30°	10730.2	10702.9	10666.5	10475.2	10016.9	9667.8	9849.9	10396.3	10484.4	11659.0	12481.6
32.5°	11431.4	11516.4	11483.0	11258.4	10663.4	10074.5	10016.9	10390.3	10463.1	11601.4	12381.5
35°	12175.1	12214.5	12372.3	12257.0	11646.9	10733.2	10329.5	10484.4	10542.0	11604.4	12311.7
37.5°	12757.9	12864.1	13234.4	13334.6	12760.9	11604.4	10836.4	10751.5	10775.7	11753.1	12339.0
40°	13462.1	13644.2	14120.8	14530.5	14154.1	12736.6	11698.5	11246.2	11276.6	12111.3	12518.1
42.5°	14354.5	14482.0	15122.5	15677.9	15617.2	14233.1	12742.7	12056.7	12071.8	12824.7	13018.9
45°	15398.7	15580.8	16300.2	17134.9	17277.6	15926.8	14251.3	13283.0	13273.9	13932.5	13953.8
47.5°	16734.3	16846.6	17559.9	18470.5	19047.3	18054.6	16081.6	15043.5	14946.4	15547.4	15374.4
50°	17963.6	18139.7	18680.0	19675.6	21111.3	20546.8	18488.7	17326.1	17098.5	17660.1	17368.7
52.5°	18479.7	18664.8	19120.1	20355.5	22881.0	23770.4	21545.4	20048.9	19669.5	20100.5	19994.3
55°	17584.1	17824.0	18248.9	19751.5	23658.0	27488.8	25667.5	23196.7	22920.4	22735.3	22765.6
57.5°	15177.1	15404.7	15978.4	17635.7	22729.2	30187.2	31553.2	27242.8	26651.0	25798.0	25943.7
60°	11552.8	11695.4	11993.0	13829.3	19976.1	30888.4	38237.2	32357.6	31981.2	28848.6	28951.8
62.5°	8204.7	8365.7	8572.0	9488.7	14624.6	28912.4	43470.2	39499.9	38155.2	32008.5	31908.3
65°	6662.8	6553.5	6802.4	7230.4	8581.1	22407.4	44648.0	49413.6	47562.0	36170.1	34779.8
67.5°	5479.0	5363.6	5609.5	6371.3	6526.1	13006.8	40404.4	55848.6	55478.4	40695.9	37696.8
69°	4850.6	4789.9	5005.4	5873.5	6265.1	9236.8	35198.7	56744.1	56832.2	43363.9	38146.1
70°	4371.0	4395.3	4604.7	5621.6	6146.7	7615.8	30084.0	55508.7	56255.4	44696.5	37660.4
72.5°	3217.6	3269.2	3560.5	4656.3	6034.4	6462.4	17902.9	48484.8	49805.1	44775.5	34452.0
75°	2249.2	2225.0	2483.0	3505.9	5700.6	6404.7	10514.7	37496.5	38993.0	38701.6	28948.8
77.5°	1472.2	1511.7	1718.1	2476.9	4796.0	6356.2	6854.0	26602.4	27573.7	25883.0	17122.8
80°	1038.1	1035.0	1150.5	1690.7	3557.5	6107.2	5612.5	16767.6	16521.8	10171.7	5078.2
82.5°	594.9	637.4	771.0	1189.8	2379.8	5375.8	5163.3	8019.6	7321.4	2898.8	1715.0
85°	330.9	346.0	458.4	719.4	1390.2	4049.3	4507.6	3648.5	3442.1	1211.1	737.6
87.5°	106.3	115.3	191.2	364.3	631.3	1912.3	2552.8	1684.6	1554.1	437.1	297.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7	12657.7
2.5°	12675.9	12712.3	12615.2	12521.1	12436.1	12317.8	12211.5	12123.4	12062.7	12053.7	12023.3
5°	12718.4	12721.4	12536.3	12287.4	12044.6	11777.4	11501.2	11303.9	11118.8	11015.6	10964.0
7.5°	12748.7	12721.4	12387.5	11983.8	11516.4	11030.7	10545.1	10156.5	9856.0	9737.6	9783.1
10°	12736.6	12651.6	12162.9	11516.4	10836.4	10111.0	9412.8	8866.5	8365.7	8107.6	8113.7
12.5°	12669.8	12530.2	11829.0	10991.3	9992.6	9021.3	7952.8	7215.2	6635.5	6292.4	6186.2
15°	12612.2	12369.4	11437.4	10277.9	9036.4	7649.3	6347.1	5436.4	4950.8	4680.6	4677.6
17.5°	12551.5	12214.5	11009.4	9522.1	7937.6	6152.8	4786.9	4091.7	3864.1	3891.4	3845.9
20°	12487.7	12032.4	10563.2	8681.3	6599.0	4589.6	3584.8	3302.5	3366.3	3490.7	3508.9
22.5°	12414.9	11838.1	10083.6	7755.5	5190.6	3454.3	2907.9	2865.5	3029.3	3223.6	3250.9
25°	12302.6	11595.3	9479.6	6787.2	4003.7	2783.5	2546.7	2577.1	2737.9	2901.9	2920.0
27.5°	12144.7	11294.8	8869.5	5579.1	3008.1	2388.9	2328.2	2367.6	2446.6	2546.7	2571.0
30°	11932.2	10954.8	8168.3	4534.9	2410.2	2191.5	2167.3	2188.6	2234.1	2276.6	2288.7
32.5°	11719.8	10627.0	7461.1	3472.5	2149.1	2061.0	2036.7	2036.7	2036.7	2042.8	2045.9
35°	11522.5	10317.4	6702.2	2704.6	2012.5	1957.8	1924.5	1888.0	1881.9	1860.7	1860.7
37.5°	11413.2	10035.1	5894.8	2264.4	1912.3	1872.9	1827.3	1766.6	1733.2	1736.2	1730.2
40°	11434.4	9849.9	5160.2	2015.5	1830.3	1787.8	1718.1	1648.2	1627.0	1627.0	1620.9
42.5°	11674.2	9789.2	4456.0	1885.0	1751.4	1702.9	1614.9	1551.1	1539.0	1535.9	1542.0
45°	12226.7	9938.0	3824.6	1800.0	1684.6	1611.8	1523.8	1466.1	1454.0	1454.0	1450.9
47.5°	13304.3	10420.6	3372.4	1745.4	1636.1	1542.0	1450.9	1393.3	1372.0	1365.9	1365.9
50°	14979.8	11467.8	3035.5	1696.8	1575.4	1478.2	1384.2	1317.4	1284.0	1280.9	1277.9
52.5°	17308.0	13100.8	2904.9	1660.4	1508.6	1411.4	1308.2	1244.5	1202.1	1192.9	1186.9
55°	20030.7	15380.5	3084.0	1633.0	1438.8	1335.6	1229.3	1162.6	1123.1	1104.9	1101.8
57.5°	23184.6	18118.4	3763.9	1596.6	1375.0	1253.7	1150.5	1083.7	1041.2	1019.9	1013.8
60°	26016.6	20932.3	4950.8	1575.4	1320.4	1165.6	1059.4	998.6	959.2	938.0	934.9
62.5°	29127.9	23615.6	6368.3	1633.0	1296.1	1080.6	974.4	919.7	886.4	865.1	865.1
65°	32451.7	26301.9	7306.3	1827.3	1332.6	1013.8	883.3	837.8	807.4	792.2	789.2
67.5°	34691.8	27230.7	6019.2	2027.7	1423.6	941.0	795.3	758.9	740.6	725.4	725.4
69°	34448.9	26056.0	4440.8	2079.3	1450.9	904.5	746.7	719.4	695.1	689.0	682.9
70°	33681.0	24717.4	3721.4	2045.9	1429.7	871.2	716.4	682.9	661.7	655.7	652.6
72.5°	29999.0	21436.1	2771.4	1778.7	1217.2	755.8	634.4	604.1	585.8	576.8	576.8
75°	24923.8	17520.4	2164.3	1414.5	953.1	637.4	543.3	519.1	503.9	497.8	494.8
77.5°	13969.0	9783.1	1554.1	1107.9	722.4	516.0	455.3	434.1	418.9	412.8	412.8
80°	3891.4	2795.6	913.7	731.6	491.7	391.6	361.2	346.0	324.8	309.6	318.7
82.5°	1466.1	1211.1	522.1	440.1	312.7	261.1	252.0	239.8	230.7	209.5	209.5
85°	713.3	588.9	333.9	233.7	173.0	136.6	130.5	124.4	118.4	103.2	106.3
87.5°	245.9	261.1	145.7	85.0	51.6	33.4	27.3	15.2	15.2	15.2	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)